## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

## What is claimed is:

1. (Original) A compound selected from the group represented by Formula I:

$$R_4$$
 $N$ 
 $R_1$ 
 $R_2$ 
 $R_2$ 
 $R_3$ 
 $R_5$ 

Formula I

wherein:

T and T' are independently a covalent bond or optionally substituted lower alkylene;

R<sub>1</sub> is chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted heteroaryl, and optionally substituted heteroaralkyl;

R<sub>2</sub> and R<sub>2</sub><sup>,</sup> are independently chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, and optionally substituted heteroaralkyl; or R<sub>2</sub> and R<sub>2</sub> taken together form an optionally substituted 3-to 7-membered ring;

 $R_3$  is chosen from hydrogen, optionally substituted alkyl-, optionally substituted aryl-, optionally substituted heteroaryl-, optionally substituted heteroaryl-, optionally substituted heteroaryl-, optionally substituted heterocyclyl, -C(O)- $R_6$ , and -S(O)<sub>2</sub>- $R_{6a}$ ;

R<sub>5</sub> is chosen from hydrogen, optionally substituted alkyl-, optionally substituted aryl-, optionally substituted aralkyl-, optionally substituted heteroaralkyl-, and optionally substituted heterocyclyl-;

 $R_6$  is chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted heteroaryl, optionally substituted heteroaryl,  $R_7O$ - and  $R_{12}$ -NH-;

 $R_{6a}$  is chosen from optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, and  $R_{12}$ -NH-;

or  $R_5$  taken together with  $R_3$ , and the nitrogen to which they are bound, form an optionally substituted 5- to 12-membered nitrogen-containing heterocycle, which optionally incorporates from one to two additional heteroatoms, selected from N, O, and S in the heterocycle ring;

or  $R_5$  taken together with  $R_2$  form an optionally substituted 5- to 12-membered nitrogen-containing heterocycle, which optionally incorporates from one to two additional heteroatoms, selected from N, O, and S in the heterocycle ring;

R<sub>7</sub> is chosen from optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, and optionally substituted heteroaralkyl;

R<sub>12</sub> is chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, and optionally substituted heteroaralkyl; and

R<sub>4</sub> is chosen from hydrogen, optionally substituted alkyl, optionally substituted alkoxy, halogen, hydroxyl, nitro, cyano, optionally substituted amino, alkylsulfonyl, alkylsulfonamido, alkylthio, carboxyalkyl, aminocarbonyl, aryloxy, heteroaryloxy, optionally substituted N-heterocyclyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl;

a pharmaceutically acceptable salt of a compound of Formula I;
a pharmaceutically acceptable solvate of a compound of Formula I; or
a pharmaceutically acceptable solvate of a pharmaceutically acceptable salt of a
compound of Formula I.

2. (Original) The compound of Claim 1 comprising one or more of the following:

T and T' are each a covalent bond;

 $R_1$  is selected from hydrogen, optionally substituted  $C_1$ - $C_4$  alkyl, optionally substituted phenyl- $C_1$ - $C_4$ -alkyl-, optionally substituted phenyl, and naphthyl;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

R<sub>2'</sub> is hydrogen or optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

 $R_3$  is -C(O)- $R_6$  or S(O)2- $R_{6a}$ ;

R₄ is hydrogen, halo, hydroxyl, optionally substituted lower alkyl, optionally substituted aryl, alkoxy, cyano, substituted amino, carbamyl, aryloxy, heteroaryl, or optionally substituted N-heterocyclyl;

 $R_6$  is selected from optionally substituted  $C_1$ - $C_8$  alkyl, optionally substituted aryl- $C_1$ - $C_4$ -alkyl-, optionally substituted heteroaryl- $C_1$ - $C_4$ -alkyl-, optionally substituted heteroaryl, optionally substituted aryl,  $R_7$ O- and  $R_{12}$ -NH-,

 $R_{6a}$  is selected from  $C_1$ - $C_{13}$  alkyl; phenyl; naphthyl; phenyl substituted with halo, lower alkyl, lower alkoxy, nitro, methylenedioxy, or trifluoromethyl; biphenylyl and heteroaryl;

R<sub>7</sub> is chosen from optionally substituted alkyl and optionally substituted aryl; R<sub>12</sub> is chosen from optionally substituted alkyl and optionally substituted aryl; and R<sub>5</sub> is chosen from hydrogen, optionally substituted C<sub>1</sub>-C<sub>13</sub> alkyl, optionally substituted aryl, optionally substituted aryl-C<sub>1</sub>-C<sub>4</sub>-alkyl-, optionally substituted heterocyclyl, and optionally substituted heteroaryl-C<sub>1</sub>-C<sub>4</sub>-alkyl-.

3. (Original) The compound of Claim 2 comprising one or more of the following:

R<sub>1</sub> is naphthyl, phenyl, bromophenyl, chlorophenyl, methoxyphenyl, ethoxyphenyl, tolyl, dimethylphenyl, chorofluorophenyl, methylchlorophenyl, ethylphenyl, phenethyl, benzyl, chlorobenzyl, methylbenzyl, methoxybenzyl, cyanobenzyl, hydroxybenzyl, dichlorobenzyl, dimethoxybenzyl, or naphthylmethyl;

R<sub>2</sub> is hydrogen;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

 $R_3$  is  $-C(O)R_6$ ;

 $R_6$  is chosen from phenyl; substituted phenyl; benzyl; phenoxymethyl-; halophenoxymethyl-; phenylvinyl-; heteroaryl-; substituted heteroaryl-;  $C_1$ - $C_4$  alkyl substituted with  $C_1$ - $C_4$  alkoxy-; and benzyloxymethyl-;

R₄ is chosen from hydrogen, hydroxyl, halo, optionally substituted lower alkyl, lower alkoxy, optionally substituted phenyl, and cyano;

 $R_5$  is selected from hydrogen,  $C_1$ - $C_4$  alkyl; cyclohexyl; phenyl substituted with hydroxyl,  $C_1$ - $C_4$  alkoxy or  $C_1$ - $C_4$  alkyl; benzyl; and  $R_{11}$ -alkylene-; and

 $R_{11}$  is hydroxyl, carboxy,  $(C_1-C_4$  alkoxy)carbonyl-, di $(C_1-C_4$  alkyl)amino-,  $(C_1-C_4$  alkoxy)carbonylamino-,  $C_1-C_4$  alkoxy-, or optionally substituted N-heterocyclyl-.

4. (Original) The compound of Claim 3 comprising one or more of the following:
R<sub>1</sub> is benzyl, halobenzyl, methylbenzyl, methoxylbenzyl, cyanobenzyl,
hydroxybenzyl, or naphthylmethyl;

R<sub>2</sub> is chosen from methyl, ethyl, propyl, butyl, methylthioethyl, methylthiomethyl, aminobutyl, (CBZ)aminobutyl, cyclohexylmethyl, benzyloxymethyl, methylsulfinylmethyl, and hydroxymethyl;

R<sub>2'</sub> is hydrogen;

R4 is optionally substituted methyl or optionally substituted phenyl;

R<sub>6</sub> is tolyl, halophenyl, methylhalophenyl, hydroxymethylphenyl,

halo(trifluoromethyl)phenyl-, methylenedioxyphenyl, formylphenyl or cyanophenyl; and

 $R_5$  is  $R_{11}$ -alkylene- wherein  $R_1$  is amino,  $C_1$ - $C_4$  alkylamino-, di( $C_1$ - $C_4$  alkyl)amino-,  $C_1$ - $C_4$  alkoxy-, hydroxyl, or N-heterocyclyl.

(Original) The compound of Claim 4 comprising one or more of the following:
 R<sub>1</sub> is benzyl;

R<sub>2'</sub> is hydrogen;

R<sub>2</sub> is ethyl or propyl; and

R<sub>5</sub> is aminoethyl, aminopropyl, aminobutyl, aminopentyl, aminohexyl, methylaminoethyl, methylaminopropyl, methylaminobutyl, methylaminopentyl, methylaminohexyl, dimethylaminoethyl, dimethylaminopropyl, dimethylaminobutyl, dimethylaminopentyl, ethylaminoethyl, ethylaminopropyl, ethylaminobutyl, diethylaminobutyl, diethylaminopentyl, diethylaminopentyl, diethylaminopentyl, or diethylaminohexyl.

- 6. (Original) The compound of Claim 5 wherein R<sub>2</sub> is i-propyl
- 7. (Original) The compound of Claim 1 comprising one or more of the following:T and T' are each a covalent bond;

 $R_1$  is selected from hydrogen, optionally substituted  $C_1$ - $C_4$  alkyl, optionally substituted phenyl- $C_1$ - $C_4$ -alkyl-, optionally substituted phenyl, and naphthyl.

 $R_2$  is optionally substituted  $C_1$ - $C_4$  alkyl;

R<sub>2'</sub> is hydrogen or optionally substituted C₁-C₄ alkyl;

R₄ is hydrogen, halo, hydroxyl, optionally substituted lower alkyl, optionally substituted aryl, alkoxy, cyano, substituted amino, carbamyl, aryloxy, heteroaryl; or optionally substituted N-heterocyclyl;

 $R_6$  is selected from optionally substituted  $C_1$ - $C_8$  alkyl, optionally substituted aryl- $C_1$ - $C_4$ -alkyl-, optionally substituted heteroaryl- $C_1$ - $C_4$ -alkyl-, optionally substituted heteroaryl, optionally substituted aryl,  $R_7$ O- and  $R_{12}$ -NH-,

R<sub>7</sub> is chosen from optionally substituted alkyl and optionally substituted aryl;

R<sub>12</sub> is chosen from optionally substituted alkyl and optionally substituted aryl; and

R<sub>3</sub> taken together with R<sub>5</sub> and the nitrogen to which they are bound, forms an optionally substituted imidazolyl ring of the formula:

$$R_8$$
 $R_{10}$ 
 $R_{10}$ 

## wherein

 $R_8$  is chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaralkyl, and optionally substituted heteroaryl; and

 $R_{\theta}$  and  $R_{10}$  are independently hydrogen, optionally substituted alkyl, optionally substituted aryl, or optionally substituted aralkyl.

8. (Original) The compound of Claim 7 comprising one or more of the following:

R<sub>1</sub> is chosen from naphthyl, phenyl, bromophenyl, chlorophenyl, methoxyphenyl, ethoxyphenyl, tolyl, dimethylphenyl, chorofluorophenyl, methylchlorophenyl, ethylphenyl, phenethyl, benzyl, chlorobenzyl, methylbenzyl, methoxybenzyl, cyanobenzyl, hydroxybenzyl, dichlorobenzyl, dimethoxybenzyl, or naphthylmethyl;

R<sub>2</sub>, is hydrogen;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

R<sub>6</sub> is chosen from phenyl; substituted phenyl; benzyl; phenoxymethyl-; halophenoxymethyl-; phenylvinyl-; heteroaryl-; substituted heteroaryl-;C<sub>1</sub>-C<sub>4</sub> alkyl substituted with C<sub>1</sub>-C<sub>4</sub> alkoxy-; and benzyloxymethyl-;

R₄ is chosen from hydrogen, hydroxyl, halo, optionally substituted lower alkyl, lower alkoxy, optionally substituted phenyl, and cyano; and

R<sub>8</sub> is aryl, substituted aryl, aralkyl, heteroaryl, substituted heteroaryl, heteroaralkyl, substituted aralkyl, or substituted heteroaralkyl.

(Original) The compound of Claim 1 comprising one or more of the following:
 T and T' are each a covalent bond;

 $R_1$  is selected from hydrogen, optionally substituted  $C_1$ - $C_4$  alkyl, optionally substituted phenyl- $C_1$ - $C_4$ -alkyl-, optionally substituted naphthylmethyl, optionally substituted phenyl, and naphthyl;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

R<sub>2'</sub> is hydrogen or optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

R₄ is hydrogen, halo, hydroxyl, optionally substituted lower alkyl, optionally substituted aryl, alkoxy, cyano, substituted amino, carbamyl, aryloxy, heteroaryloxy, heteroaryl, or optionally substituted N-heterocyclyl;

 $R_6$  is selected from optionally substituted  $C_1$ - $C_8$  alkyl, optionally substituted aryl- $C_1$ - $C_4$ -alkyl-, optionally substituted heteroaryl- $C_1$ - $C_4$ -alkyl-, optionally substituted heteroaryl, optionally substituted aryl,  $R_7$ O- and  $R_{12}$ -NH-,

R<sub>7</sub> is chosen from optionally substituted alkyl and optionally substituted aryl;

R<sub>12</sub> is chosen from optionally substituted alkyl and optionally substituted aryl; and

R<sub>3</sub> taken together with R<sub>5</sub> and the nitrogen to which they are bound, forms an optionally substituted imidazolinyl ring of the formula:

$$R_{8}$$
 $R_{10}$ 
 $R_{10}$ 
 $R_{10}$ 
 $R_{9}$ 

wherein,

R<sub>8</sub> is chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted heteroaralkyl, arid optionally substituted heteroaryl; and

 $R_9$ ,  $R_{9'}$ ,  $R_{10}$ , and  $R_{10'}$  are independently chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, and optionally substituted aralkyl.

10. (Original) The compound of Claim 9 comprising one or more of the following:

R<sub>1</sub> is chosen from naphthyl, phenyl, bromophenyl, chlorophenyl, methoxyphenyl, ethoxyphenyl, tolyl, dimethylphenyl, chorofluorophenyl, methylchlorophenyl, ethylphenyl, phenethyl, benzyl, chlorobenzyl, methylbenzyl, methoxybenzyl, cyanobenzyl, hydroxybenzyl, dichlorobenzyl, dimethoxybenzyl, or naphthylmethyl;

R<sub>2'</sub> is hydrogen;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

 $R_6$  is chosen from phenyl; substituted phenyl; benzyl; phenoxymethyl-; halophenoxymethyl-; phenylvinyl-; heteroaryl-; substituted heteroaryl-;  $C_1$ - $C_4$  alkyl substituted with  $C_1$ - $C_4$  alkoxy-; and benzyloxymethyl-;

R₄ is chosen from hydrogen, hydroxyl, halo, optionally substituted lower alkyl, lower alkoxy, optionally substituted phenyl, and cyano;

R<sub>8</sub> is aryl, substituted aryl, aralkyl, heteroaryl, substituted heteroaryl, heteroaralkyl, substituted aralkyl, or substituted heteroaralkyl; and

 $R_9$ ,  $R_{9'}$ ,  $R_{10}$ , and  $R_{10'}$  are independently selected from the group consisting of hydrogen and optionally substituted lower alkyl.

11. (Original) The compound of Claim 1 wherein

T and T' are absent;

 $R_1$  is benzyl, halobenzyl, methylbenzyl, methoxylbenzyl, cyanobenzyl, hydroxybenzyl, or naphthylmethyl;

R₂ is optionally substituted C₁-C₄ alkyl;

R<sub>2</sub> is hydrogen;

R<sub>4</sub> is optionally substituted methyl or optionally substituted phenyl;

R<sub>3</sub> is hydrogen; and

R₅ is hydrogen.

12. (Original) The compound of Claim 1 wherein

T and T' are absent;

 $R_1$  is benzyl, halobenzyl, methylbenzyl, methoxylbenzyl, cyanobenzyl, hydroxybenzyl, or naphthylmethyl;

 $R_2$  is optionally substituted  $C_1$ - $C_4$  alkyl;

R<sub>2</sub>, is hydrogen;

R<sub>4</sub> is optionally substituted methyl or optionally substituted phenyl;

 $R_3$  is  $-C(O)R_6$ ;

R<sub>6</sub> is optionally substituted phenyl; and

R<sub>5</sub> is optionally substituted alkyl.

13. (Original) The compound of Claim 1 wherein

T and T' are absent;

R<sub>1</sub> is benzyl, halobenzyl, methylbenzyl, methoxylbenzyl, cyanobenzyl, hydroxybenzyl, or naphthylmethyl;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

R<sub>2'</sub> is hydrogen;

R<sub>4</sub> is optionally substituted methyl or optionally substituted phenyl;

R<sub>3</sub> is optionally substituted phenyl, heterocyclyl, or naphthyl; and

R<sub>5</sub> is optionally substituted alkyl.

14. (Original) The compound of Claim 1 wherein

T and T' are absent;

R<sub>1</sub> is benzyl, halobenzyl, methylbenzyl, methoxylbenzyl, cyanobenzyl, hydroxybenzyl, or naphthylmethyl;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

R<sub>2</sub><sup>1</sup> is hydrogen;

 $R_4$  is optionally substituted methyl or optionally substituted phenyl; and  $R_3$  and  $R_5$  taken together form an optionally substituted imidazolinyl ring.

15. (Original) The compound of Claim 1 wherein

T and T' are absent;

R<sub>1</sub> is benzyl, halobenzyl, methylbenzyl, methoxylbenzyl, cyanobenzyl, hydroxybenzyl, or naphthylmethyl;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

R<sub>2</sub>' is hydrogen;

 $R_4$  is optionally substituted methyl or optionally substituted phenyl; and  $R_3$  taken together with  $R_5$  form an optionally substituted imidazolyl ring.

16. (Original) The compound of Claim 1 wherein

T and T' are absent;

R<sub>1</sub> is benzyl, halobenzyl, methylbenzyl, methoxylbenzyl, cyanobenzyl, hydroxybenzyl, or naphthylmethyl;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

R<sub>2'</sub> is hydrogen;

R₄ is optionally substituted methyl or optionally substituted phenyl; and R₃ and R₅ taken together form an optionally substituted imidazolidinyl ring.

17. (Original) The compound of Claim 1 wherein

T and T' are absent;

R<sub>1</sub> is benzyl, halobenzyl, methylbenzyl, methoxylbenzyl, cyanobenzyl, hydroxybenzyl, or naphthylmethyl;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

R<sub>2'</sub> is hydrogen;

 $R_4$  is optionally substituted methyl or optionally substituted phenyl; and  $R_3$  and  $R_5$  taken together form an optionally substituted piperazinyl ring.

18. (Original) The compound of Claim 1 wherein

T and T' are absent;

 $R_1$  is benzyl, halobenzyl, methylbenzyl, methoxylbenzyl, cyanobenzyl, hydroxybenzyl, or naphthylmethyl;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

R<sub>2</sub> is hydrogen;

R<sub>4</sub> is optionally substituted methyl or optionally substituted phenyl; and

Application No. 10/529,630 Attorney Docket No. 09367.0006

R<sub>3</sub> and R<sub>5</sub> taken together form an optionally substituted diazepinoyl ring.

19. (Original) The compound of Claim 1 wherein

T and T' are absent;

R<sub>1</sub> is most preferably chosen from benzyl, halobenzyl, methylbenzyl, methoxylbenzyl, cyanobenzyl, hydroxybenzyl, or naphthylmethyl;

R<sub>2</sub> is optionally substituted C<sub>1</sub>-C<sub>4</sub> alkyl;

R<sub>2</sub><sup>1</sup> is hydrogen;

R<sub>4</sub> is optionally substituted methyl or optionally substituted phenyl;

R<sub>5</sub> is optionally substituted alkyl;

R<sub>3</sub> is-SO<sub>2</sub>R<sub>6a</sub>, and

R<sub>6a</sub> is substituted phenyl or naphthyl.

- 20. (Currently Amended) The compound of <u>Claim 1</u> any of the above claims wherein the stereogenic center to which R<sub>2</sub> and R<sub>2</sub> is attached is of the R configuration.
- 21. (Currently Amended) A pharmaceutical composition comprising a pharmaceutical excipient and a therapeutically effective amount of a compound of Claim 1 any of Claims 1-19.
- 22. (Currently Amended) A method of treatment comprising administering an effective amount of a compound of Claim 1 any of Claims 1-19 to a patient suffering from a cellular proliferative disease.

- 23. (Original) The method of Claim 22 wherein the cellular proliferative disease is cancer, hyperplasia, restenosis, cardiac hypertrophy, an immune disorder or inflammation.
- 24. (Original) A method of treatment for a cellular proliferative disease comprising administering to a patient suffering therefrom a compound of Claim 1 in an amount sufficient to modulate KSP kinesin activity in cells affected with the disease.
- 25. (Currently Amended) A kit comprising a compound of <u>Claim 1</u> any of <u>Claims 1</u>
  49 and a package insert or other labeling including directions for treating a cellular proliferative disease by administering an effective amount of said compound.